



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# JOURNAL OF MYCOLOGY.

---

Vol. II. MANHATTAN, KANSAS, FEBRUARY, 1886. No. 2.

---

## THE PHYLLOSTICTAS OF NORTH AMERICA.

BY GEORGE MARTIN.

PHYLLOSTICTA, PERS.; FRIES, S. M., 2, p. 257.

(Etym. *phyllon* leaf and *stictos*, pricked or spotted, a punctate or spotted leaf.) Perithecia lenticular, thinly membranaceous, covered by the epidermis, but often protruded, punctiform, growing in discolored areas of leaves, and rarely of branches. Sporulæ small, ovoid, entire, hyaline, or light green; basidia very small, or none. SYLLOGE FUNGORUM, 3, p. 3.

They have been separated into two classes, for convenience:

A. Those found on trees, shrubs or woody plants.

B. Those found on herbaceous plants.

Descriptions that have been copied without being verified are enclosed in quotation marks.

A. Those found on trees, shrubs or woody plants.

1. PHYLLOSTICTA ACERICOLA, Cke. & Ell. Grev., p. 61.

(*Sphaeropsis minima*, B. & C.) Grev., III, p. 2; Ellis, N. A. F., No. 534.

Epiphyllous; spots pallid, 5—8 millim. in diam., border purple; perithecia brown-black, globose, scattered, 120  $\mu$ ; sporulæ ovate, hyaline, 8—9 x 5—6  $\mu$ . On maple leaves.

2. PHYLLOSTICTA ABORTIVA, E. & K. Journ. Mycol., I, 4.

Spots brown, suborbicular, .25—1 cm., with a definite, darker colored, scarcely raised margin; perithecia innate, punctiform, minute, black, and thickly scattered over the spots on both sides of the leaves; sporulæ imperfectly developed. On leaves of *Menispermum Canadense*, Kansas.

3. PHYLLOSTICTA AFFINIS, E. & K. Am. Nat. 17, p. 1115.

Spots brown, lighter in the center, elongate or angular, .5—1 cm., border dark, elevated; perithecia yellowish, depressed, rather large, few, subcentral; sporulæ oblong, or oblong-elliptical, 4—6 x 2  $\mu$ . On Sassafras leaves. Probably only a synonym of *P. Sassafras*, Cke.

4. *PHYLLOSTICTA AMPELOPSIDIS*, E. & M. N. A. F., No. 1169.

Spots light brown, subcircular, soon breaking out, 2—5 millim., border darker, narrow; perithecia dark brown, epiphyllous, scattered, mostly circinate in the spots, 100—150  $\mu$ ; sporulæ hyaline, oval, ends obtuse, nucleate, 9 x 6  $\mu$ , exuding in white masses. On leaves of *Ampelopsis quinquefolia*. Pa. & N. J. "May be a variety of *P. Labruscæ*."

5. *PHYLLOSTICTA ASIMINÆ*, E. & K. N. A. F., No. 1164; Am. Nat., 17, p. 1165.

Spots pale brown, irregular, .5—1 cm., border dark, narrow, raised; perithecia black, subglobose, barely erumpent, epiphyllous, scattered, 100—125  $\mu$  in diameter; sporulæ obovate, subhyaline, tinged with green, 7—9 x 5—6  $\mu$ . On leaves of *Asimina triloba*. Ohio.

6. *PHYLLOSTICTA CATALPÆ*, E. & M. N. A. F., No. 1368; Am. Nat., 18, p. 189.

Spots pale brown, circular, 5—7 millim. in diameter, border darker; perithecia brown, lenticular, epiphyllous, scattered, often sterile, 112 x 84  $\mu$ ; sporulæ subhyaline, oval, 5—7 x 2½—4½  $\mu$ . On leaves of *Catalpa bignonioides*. Pa.

7. *PHYLLOSTICTA CIRCUMVALLATA*, Winter. Journ. Mycol., I, p. 123.

"Spots gray, round, 5 millim. in diameter, border dark brown, elevated; perithecia scattered, mostly epiphyllous, lenticular, black membranaceous, 100—120  $\mu$  in diameter; sporulæ elliptic, ends acuminate, hyaline, continuous, with two large nuclei, 7—9 x 3½—4  $\mu$ ." On leaves of *Liriodendron Tulipifera*. Missouri.

8. *PHYLLOSTICTA CLETHRICOLA*, E. & M. Am. Nat., 1882, p. 1002.

Spots pale brown, 2—10 millim. in diameter; perithecia erumpent, amphigenous; sporulæ subhyaline, ovate, guttulate, 9 x 6  $\mu$ . On leaves of *Clethra alnifolia*. N. J.

9. *PHYLLOSTICTA CORNICOLA*, (DC.) Rabh. Torrey Bull., 6, p. 351.

Spots epiphyllous, large, dark red, changing to pale in the center; perithecia few, punctiform, lenticular, erumpent, 150—200  $\mu$  in diameter; sporulæ oblong-elliptic, 2-guttulate, hyaline, 7—9 x 3—4  $\mu$ . On *Cornus*. N. America.

10. *PHYLLOSTICTA PERSICÆ*, Sacc. Mich., 1, p. 147.

Spots gray-brown, 4—5 millim. in diameter, breaking out in the center; perithecia brown, lenticular, epiphyllous, 112  $\mu$  in diameter; sporulæ subhyaline, with a slight tinge of green, ovate, or subcymbiform, 4—6 x 2—3  $\mu$ . On peach leaves. Ohio.

11. *PHYLLOSTICTA CRATÆGI*, (Cke.), Sacc. Sylloge, 3, p. 6.

*Chilaria Cratægi*, Cke. Grev., 12, p. 25. Rav., F. A., No. 516.

Perithecia light-brown, very delicate, hypophyllous, clustered, 130  $\mu$ ; sporulæ hyaline, oblong, or oval, 6—12 x 1  $\mu$  (3 x 1½  $\mu$ , Sacc.). On leaves of *Gratægus*. Carolina.

12. *PHYLLOSTICTA FRAXINI*, E. & M. Am. Nat., 18, p. 189; N. A. F., No. 1163.

Spots light-brown,  $\frac{1}{2}$ —1 cm. in diameter, border dark purple, narrow; perithecia epiphyllous, scattered, black, lenticular, 130—150  $\mu$  in diameter; sporulæ oblong, or oblong-elliptical, hyaline, 1—2-nucleate, 7—9 x  $2\frac{1}{2}$ —3  $\mu$ . On leaves of *Fraxinus*. Pa.

13. *PHYLLOSTICTA GARRYÆ*, Cke. & Hark. Grev., 9, p. 84.

"Epiphyllous, spots elliptical, light gray, border purple; perithecia black, shining, slightly prominent; sporulæ narrow, elliptic, hyaline, continuous, 10—12 x 2— $2\frac{1}{2}$   $\mu$ ." On *Garrya elliptica*. California.

14. *PHYLLOSTICTA GLAUCA*, Cke. *Septoria glauca*, Cke. Rav., F. A., No. 93.

Spots pallid, nearly round, 3—4 millim. in diameter, border dark brown, slightly raised; perithecia black, punctiform, epiphyllous, erumpent, 65—80  $\mu$  in diameter; sporulæ hyaline, oblong, 4 x 1  $\mu$ . On leaves of *Magnolia glauca*. S. Carolina.

15. *PHYLLOSTICTA GORDONIÆ*, E. & M. Journ. Mycol., 1, p. 100.

Spots dark brown, dry, occupying the ends and sides of the leaves; perithecia brown-black, subglobose, slightly erumpent, amphigenous, 120—140  $\mu$  in diameter; sporulæ hyaline, oblong, nucleate, 12 x 3  $\mu$ . On leaves of *Gordonia Lasianthus*. Florida.

16. *PHYLLOSTICTA GROSSULARIÆ*, Sacc. Mich., 1, p. 136.

"Spots subcircular, sinuous, dry, grayish-white, margin dusky; perithecia punctiform, scattered, epiphyllous; sporulæ ovoid, or ellipsoid, hyaline, 5—6 x 3  $\mu$ ." On leaves of *Ribes Grossularia*. N. America.

17. *PHYLLOSTICTA HAMAMELIDIS*, Cke. Rav., F. A., No. 511; Ellis, N. A. F., No. 1154.

Spots dark brown upon the upper surface, light brown on the under, definite, somewhat irregular in outline, 3—5 millim. in diameter; perithecia brown, hypophyllous, clustered, erumpent, 120—130  $\mu$ ; sporulæ hyaline, oval, or cylindric-oval, 2—3 x  $1\frac{1}{2}$   $\mu$ . On leaves of *Hamamelis Virginica*. S. Carolina.

18. *PHYLLOSTICTA HETEROMELES*, Cke. & Hark. Ellis, N. A. F., No. 751; Grev., 9, p. 84.

Epiphyllous; spots pallid, orbicular, or confluent, occupying most of the edge of the leaves, border black, raised; perithecia black, convex, mostly epiphyllous, erumpent, thickly aggregated, 130—200  $\mu$ ; sporulæ hyaline, elliptic, continuous, 8 x 2  $\mu$ . On leaves of *Heteromeles*. California.

19. *PHYLLOSTICTA LABRUSCÆ*, Thuem. Ellis, N. A. F., No. 626.

Spots yellowish brown, 5 millim., suborbicular, border dark brown; perithecia black, subglobose, erumpent, circinate near the border, or clustered, epiphyllous, 112—120  $\mu$  in diameter; sporulæ subhyaline, oblong, ends round, 8—11 x 6—7  $\mu$ . On leaves of *Vitis Labruscæ*. N. Jersey.

20. *PHYLLOSTICTA LEUCOTHÆS*, E. & M. Ellis, N. A. F., No. 1369.

Spots rusty brown, large, involving the apices or often the entire upper half of the leaves, distinctly limited; perithecia black, globose, few, scattered, epiphyllous, deeply immersed, or but slightly prominent, 150—200  $\mu$  in diameter; sporulæ hyaline, ovate, oblong, granular, or 2—3-nucleate, 15—21 x 6—7  $\mu$ . Differs from *P. terminalis* in color of spots and larger spores. On leaves of *Leucothoe acuminata*. Florida.

21. *PHYLLOSTICTA LIRIODENDRICA*, Cke. Sylloge 3, p. 30. *P. liriodendri*, Cke. Grev. 12, p. 26.

Epiphyllous; spots orbicular, dusky, turning gray, border brown; perithecia few, punctiform, congregated in the center, black; sporulæ elliptical, hyaline, 6—8 x 2—3  $\mu$ . On leaves of *Liriodendron Tulipifera*. S. Carolina.

22. *PHYLLOSTICTA LYCH*, E. & K. Ellis, N. A. F., 1157.

Spots brown, turning white, circular, 1—2 millim., border thickened, perithecia black, lenticular, amphigenous, scattered, 100—140 millim. in diameter; sporulæ white, hyaline, elliptical, ends subacute, 6—12 x 2—3  $\mu$ . On leaves of *Lycium vulgare*. Ohio.

23. *PHYLLOSTICTA MAGNOLIÆ*, Sacc. Mich. 1, p. 139.

Spots large, gray-brown, covering the ends and sides of the leaves; perithecia black, globose, erumpent, epiphyllous, 128—160  $\mu$  in diameter; sporulæ hyaline, oval, ends round, 6—2 x 3  $\mu$  ("4 x 1½—2  $\mu$ , var. 8—12 x 3—4½  $\mu$ , Sylloge 3, p. 25.") On leaves of *Magnolia grandiflora*. Florida.

24. *PHYLLOSTICTA MICROPUNCTA*, Cke. Texas Fungi, No. 47. Sylloge 3, p. 18.

Spots subcircular; perithecia black, lenticular, barely erumpent, scattered, epiphyllous, 64—80  $\mu$  in diameter; sporulæ hyaline, ovate, 3 x 1½  $\mu$ . On leaves of *Persea Caroliniensis*. Texas.

25. *PHYLLOSTICTA MYRICÆ*, Cke. Rav. F. A., No. 154. Ellis, N. A. F., No. 535.

Spots suborbicular, red-brown; perithecia very small, covered, in little nests; sporulæ narrow, oval, hyaline, 7  $\mu$  long. Specimen No. 535, N. A. F., differs somewhat from the above published description, and is of doubtful identity. It has large brown irregular spots covering the ends and sides of the leaves; perithecia black, subglobose, immersed, epiphyllous, 160  $\mu$  in diameter; sporulæ oval, hyaline, 9—18 x 3—6  $\mu$ . On leaves of *Myrica cerifera*. S. Carolina and Florida.

26. *PHYLLOSTICTA NERII*, West. Sylloge, 1, p. 26.

Spots oval, or suborbicular, light gray to white, 10—18 millim., border brown, elevated; perithecia amphigenous, at last erumpent, scattered, black, 200—250  $\mu$ ; sporulæ hyaline, oval, 1—2-nucleate, 15 x 4—6  $\mu$ ; ("15—18 x 5—6  $\mu$ , cloudy, or 1-guttulate," Sylloge.) On leaves of *Nerium Oleander*. Florida.

27. *PHYLLOSTICTA NYSSÆ*, Cke. Grev., 12, p. 26; Rav., F. A., No. 798.

Spots gray, large, irregular, border purple; perithecia black, erumpent, punctiform, amphigenous, 65—95  $\mu$ ; sporulæ hyaline, subelliptic,  $3\frac{1}{2} \times 1\frac{1}{2} \mu$ . On leaves of *Nyssa capitata*. Georgia.

28. *PHYLLOSTICTA OLÆÆ*, E. & M.

Spots gray, large, occupying the apices and sides of the leaves, border brown, elevated; perithecia black, subglobose, prominent, mostly epiphyllous, about 140  $\mu$  in diameter; sporulæ hyaline, oblong-oval, 18—24  $\times$  3—4  $\mu$ . On leaves of *Olea Americana*. Florida.

29. *PHYLLOSTICTA PERSEÆ*, E. & M. Journ. Mycol., 1, p. 100.

Spots brownish-gray, large, covering the ends and sides of the leaves; perithecia brown-black, lenticular, erumpent, epiphyllous, 150—300  $\mu$ ; sporulæ hyaline, oblong, nucleate, 3—8  $\times$  1—3  $\mu$ . On leaves of *Persea Carolinensis*. Florida.

Mr. Ellis now thinks this is identical with *P. micropuncta*, Cke., and will have to be dropped. I have retained it for the present, however, as, from the specimens at my command, I have not been able to satisfy myself that it is so.

30. *PHYLLOSTICTA PHOMIFORMIS*, Sacc. Mich., 1, p. 573. Ellis, N. A. F., No. 1160.

Spots pallid, 3—5 millim., border brown, slightly elevated; perithecia loosely clustered, globose-lenticular, erumpent, amphigenous, black, 130—150  $\mu$ ; sporulæ oblong, ends acutish, granular, hyaline, 20—22  $\times$  8—10  $\mu$ , basidia short, attenuated upwards. On leaves of *Quercus alba*. Pa.

31. *PHYLLOSTICTA PLATANI*, Sacc. et Speg. Mich., 1, p. 153.

Spots large, brown, turning gray; perithecia dark brown, lenticular, erumpent, mostly hypophyllous, 90  $\mu$  in diameter; sporulæ hyaline, oblong, 4  $\times$  1  $\mu$ .

"Spots obsolete; perithecia scattered, punctiform, lenticular, yellow; sporulæ ovoid-oblong, 5—6  $\times$  1—1 $\frac{1}{2}$   $\mu$ , minutely 2-guttulate, cloudy, hyaline" (Michelia). On leaves of *Platanus*. Kansas.

32. *PHYLLOSTICTA PYRORUM*, Cke. Grev., 12, p. 26. Rav., F. A., No. 512.

Spots white, large, often occupying the half or whole of leaf, margin purple; perithecia black, scattered, convex, epiphyllous; sporulæ linear, straight, or curved, hyaline, 10  $\times$  2  $\mu$ . On pear leaves. S. Carolina.

33. *PHYLLOSTICTA PYRINA*, Sacc. Mich. 1, p. 134. Ellis, N. A. F., No. 1370.

Spots gray-brown, occupying the apices and sides of the leaves; perithecia black, flattened, erumpent, epiphyllous, 130—155  $\mu$ ; sporulæ hyaline, slightly smoky, ovoid, ends obtuse, 4 $\frac{1}{2}$ —6  $\times$  3  $\mu$ . "Spots pallid, dry, variable; perithecia mostly epiphyllous, punctiform, lenticular, erum-

pent, 100—130  $\mu$  in diameter; structure loosely cellular, ferruginous; sporulæ hyaline, ovoid, or ellipsoid, 4—1 x 2—2½  $\mu$ ." (*Michelia*.) On *Pyrus*. N. J.

34. *PHYLLOSTICTA QUERCUS RUBRÆ*, W. R. Gerard. Bull. of Torrey Club, 1875—78.

"Spots few, subcircular, or irregular, white, border red; perithecia epiphyllous, numerous, minute, globose, black, collected in the center of the spots; sporulæ very small, ovoid." On leaves of *Quercus rubra*. New York.

35. *PHYLLOSTICTA SASSAFRAS*, Cke. Grev., 12, p. 26. Rav., F. A., No. 515.

Epiphyllous; spots orbicular, gray-brown, or dusky; perithecia numerous, at times circinate, scattered, black; "sporulæ hyaline, elliptic, lanceolate, 7 x 1½  $\mu$ ." On leaves of *Sassafras officinalis*. S. Carolina.

In the American Naturalist, 17, p. 1115, Ellis & Kellerman state that the sporulæ are "globose, brown, coarsely granular." This is probably an error. My specimen in F. A. is sterile.

36. *PHYLLOSTICTA SEROTINA*, Cke. Grev., 12, p. 26. Rav., F. A., No. 513.

Spots light brown, orbicular, border darker, narrow, obscure; perithecia dark-brown, epiphyllous, scattered, punctiform, 150  $\mu$  in diameter; sporulæ hyaline, slightly smoky, elliptic-lanceolate, 6 x 3—4  $\mu$  ("12 x 3  $\mu$ "). On leaves of *Cerasus serotina*. S. Carolina, N. Jersey and Kansas.

37. *PHYLLOSTICTA SINUOSA*, E. & M. Am. Nat., 18, p. 1264. Ellis, N. A. F., No. 1367.

Spots orbicular, reddish-brown, turning nearly white, mostly 2—3 millim. in diameter; perithecia black, lenticular, epiphyllous, scattered, mostly near the margin of the spots, 150  $\mu$  in diameter; sporulæ hyaline, oblong, or clavate-oblong, 6—15 x 1—2  $\mu$ . On leaves of *Olea Americana*. Florida.

38. *PHYLLOSTICTA SPHÆROPSOIDEA*, E. & E. Ellis, N. A. F., No. 1159. Bull. Torrey Bot. Club, 10, p. 97.

Spots reddish-brown, 1—2 cm. in diameter. Sometimes confluent, border light yellow; perithecia brown, scattered, punctiform, epiphyllous, but visible beneath, 120  $\mu$ ; sporulæ globose, or ovoid, hyaline, granular, 1—2-nucleate, 12—15 x 8—10  $\mu$ ; basidia stout. On living leaves of *Aesculus hippocastanum*. Newfield, N. J.

39. *PHYLLOSTICTA TERMINALIS*, E. & M. Am. Nat., 18, p. 70. Ellis, N. A. F., No. 1167.

Spots large, brown, becoming nearly white, border purple, black, narrow; perithecia black, globose, slightly prominent beneath the cuticle, epiphyllous, 100—120  $\mu$  in diameter; sporulæ hyaline, ovoid, ends obtuse, 15 x 4½  $\mu$ . On leaves of *Ilex Dahoon*. Florida.

40. *PHYLLOSTICTA TOXICODONDRI*, Thum. Sylloge, 3, p. 17.

"Spots small, reddish-brown, irregular, or subcircular, border dark red; perithecia epiphyllous; scattered, or solitary, black, medium, lenticular; sporulæ ellipsoid, hyaline, guttulate,  $1\frac{1}{2} \times 1 \mu$ ." On leaves of *Rhus Toxicodendron*. S. Carolina.

41. *PHYLLOSTICTA TOXICA*, E. & M. Ellis, N. A. F., No. 1162. Am. Nat., 1882, p. 1002.

Spots gray, round, small, border dark brown; perithecia black, epiphyllous, innate,  $70 \mu$  in diameter; sporulæ subhyaline, oval, subglobose, granular,  $6-7\frac{1}{2} \mu$ . On fading leaves of *Rhus Toxicodendron*. Iowa.

42. *PHYLLOSTICTA VESICATORIA*, Thum. Sylloge, 3, p. 34.

"Spots large, dry, vesicular, brown, border purple; perithecia epiphyllous, scattered, globose, semi-immersed, medium, black, ostiolate; sporulæ minute, ellipsoid-cylindrical, ends round, straight, hyaline,  $2\frac{1}{2} \times 1\frac{1}{2} \mu$ ." On leaves of *Quercus cinerea*. S. Carolina.

43. *PHYLLOSTICTA VITICOLA*, Thum. Sylloge, 3, p. 20. *Septoria viticola*, Berk.

"Spots large, subcircular, gray-brown beneath, brownish-purple above, determinate; perithecia amphigenous, but often hypophyllous, few, minute, globose; sporulæ short, ellipsoid, 1-guttulate,  $8-9 \times 4 \mu$ , hyaline." On leaves of *Vitis vulpina*. S. Carolina.

44. *PHYLLOSTICTA MENTZELIÆ*, E. & K. Journ. Mycol., II, p. 4.

Spots pallid, orbicular, or oval, 5—8 millim.; perithecia amphigenous, dusky, innate-erumpent, subglobose,  $100-130 \mu$  in diameter, scattered, several in a spot; sporulæ oblong-oval, subhyaline, slightly dusky,  $7 \times 3 \mu$ . On leaves of *Mentzelia nuda*. Western Kansas.

45. *PHYLLOSTICTA VULGARIS*, Desm. Sylloge, 3, p. 18.

"Spots subcircular, reddish-olive at first, then pallid, margin gray-brown; perithecia slightly prominent, very small, globose-depressed, amber-colored at first, then dusky; sporulæ minute, cylindric-ovate, obtuse, 2-guttulate, hyaline,  $10-14 \times 2\frac{1}{2}-3\frac{1}{2} \mu$ ." On fading leaves of *Lonicera*, etc.

B. Those found on herbaceous plants.

46. *PHYLLOSTICTA AMARANTHI*, E. & K. Journ. Mycol., 1, p. 4.

Spots reddish-brown, 2—4 millim. in diameter, border dark, slightly raised; perithecia brown, erumpent, epiphyllous,  $120-150 \mu$  in diameter, 6—12 in a spot; sporulæ subhyaline, elliptical, 1—2-nucleate,  $9-11 \times 3-5 \mu$ . On leaves of *Amaranthus retroflexus*. Kansas.

47. *PHYLLOSTICTA ASTRAGALI*, Pk. Bot. Gazette, 1881, p. 275.

"Spots obsolete; perithecia numerous, often amphigenous,  $180-230 \mu$  in diameter, partially covered by the fissured epidermis; sporulæ hyaline, oblong, or oblong-fusiform,  $13-16 \times 3 \mu$ ." On leaves of *Astragalus*, living and dead. Canada.



48. *PHYLLOSTICTA APOCYNI*, Trelease, Prelim. List, par. Fungi of Wis., p. 17. Am. Nat., 18, p. 1264. (P. Apocyni, E. & M.)

Spots brown, round, 1—2 millim. in diameter, border dark, narrow, slightly raised; perithecia dark brown, subglobose, erumpent, epiphyllous, mostly in the middle of the spots, 75  $\mu$  in diameter; sporulæ subhyaline, oval, contents granular, 7—9 x 6  $\mu$ . On leaves of *Apocynum cannabinum*. N. Jersey.

The publication of this species by Prof. Trelease appears to have priority, his paper above cited bearing date Nov., 1884, and that of E. & M., December, of the same year.

49. *PHYLLOSTICTA BATATICOLA*, E. & M. Ellis, N. A. F., No. 1155. Am. Nat., 1882, p. 1002.

Spots small, white, round, 1—2 millim., border purplish; perithecia subglobose, black, few, innate, epiphyllous, 70—100  $\mu$ ; sporulæ oblong-elliptical, hyaline, 5—6 x 2—3  $\mu$ . On leaves of *Batatas*. N. Jersey.

50. *PHYLLOSTICTA BATATAS*, Cke. Rav., F. A., No. 264. Grev., 7, p. 35. *Depazea Batatas*, Thum. Myc. Univ., No. 598.

Spots pallid, subregular, 2—4 millim.; perithecia black, epiphyllous, covered by the epidermis, 100—125  $\mu$ ; sporulæ hyaline, oval, 6—7½ x 4½  $\mu$ . On leaves of *Convolvulus*.

51. *PHYLLOSTICTA CHENOPODII*, West. Ellis, N. A. F., No. 1158.

Spots pallid, nearly round, 3—5 millim. in diameter; perithecia black, erumpent, scattered, epiphyllous, but visible on both sides of the leaves, 130—160  $\mu$ ; sporulæ white, hyaline, oval, ends obtuse, 10—15 x 3  $\mu$ . On leaves of *Chenopodium album*. P. Chenopodii, Sac. Mich. 1, p. 150, appears to be a different species, and has not been reported as found in N. A.

52. *PHYLLOSTICTA CORNUTI*, E. & K. Torrey Bull., 11, p. 115.

Spots indistinct, brown, nearly round, or limited by the veinlets, more or less confluent, 2—3 millim.; perithecia black, thickly scattered, slightly erumpent, amphigenous, 90—100  $\mu$ ; sporulæ slightly colored, oblong-cylindric, or oval, 5 x 4  $\mu$ ; "3 x 1  $\mu$ ." (E. & K.) On leaves of *Asclepias Cornuti*. Kansas.

53. *PHYLLOSTICTA CRUENTA*, F. Ellis, N. A. F., No. 752. Mich., 1, p. 142.

Spots pallid, suborbicular, or ovoid, 3—10 millim., sometimes confluent, border dark-brown; perithecia olive-black, erumpent, gregarious, epiphyllous, 200  $\mu$  in diameter; sporulæ hyaline, oval, or "ovate-oblong, curved," granular, 12 x 9  $\mu$ ; "14—16 x 5½—6½  $\mu$ ." On leaves of *Smilacina racemosa*. Pa.

54. *PHYLLOSTICTA DECIDUA*, E. & K. Ellis, N. A. F., No. 1165. Am. Nat., 17, p. 1165.

Spots thin, white, subangular, often confluent and irregular, soon breaking out, 1—2 millim., margin definite, scarcely raised; perithecia dark-brown, subglobose, epiphyllous, but visible on both surfaces of the leaves, sparse, 60—100  $\mu$ ; sporulæ subhyaline, oblong-elliptical, 3—7 x 1½—3  $\mu$ ; "mostly 3—4 x 1½  $\mu$ , the longest with 2—3 faint nuclei." On leaves of *Leonurus cardiaca*. Ohio.

(To be continued.)